

Ayatullāh al-‘Uzmā Yadullāh Dūzdūzānī

# A Treatise on Moon Sighting

On the Conditionality  
of Unity of Horizon  
for Establishing the  
New Crescent



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Translated by:

Abū Zahrā<sup>2</sup> Muḥammadī



## Introduction

Of late many have questioned whether ‘unity of horizon’ (*ittiḥād al-ufuq*) is a condition for determining the new crescent or not, notwithstanding the fact that this question has been a subject of discussion from the fourth century – from the time of Shaykh Ṭūsī (q). However, in our time it has become a contentious and controversial issue.

On the other hand, the use of communication media such as telephones, fax machines, radios, televisions etc. has fomented this controversy and questioning the reports of sighting the new crescent of Shawwāl has become commonplace as the differences of opinion on this matter become the subject of discussion in various gatherings.

We are also quite surprised that for the last thirty years the month of Ramaḍān has always been 29 days, as this is deemed highly improbable according to astronomical calculations. It may be that this is the reason why some groups [of scholars] have reformulated their opinions and arrived at the conclusion that unity of horizon is not a condition and if the crescent is seen in one part of the globe, it should be deemed sufficient for all other places – whether it is seen in the East or West.

In the same way, they opine that even if the sighting is done using an optical aid, it is enough to establish the beginning of a new month. They imagine that by this eduction and reformulation, they will be able to remove the differences and announce a single day of 'Eid in Islamic societies. However, we must note that it is unlikely that these opinions and reformulations would solve the differences, because these differences are based on principles, and it is not possible to force the views of one group on another.

Therefore, in response to the request of some friends, we decided to write a short treatise on this subject in simple and accessible language with the hope that we are able to fulfil at least part of our responsibility of propagating the laws of Islam.

## Historical Background

The issue that will be discussed in this treatise, namely the conditionality of ‘unity of horizon’ in establishing the first of a lunar month or the inapplicability of ‘unity of horizon’ for establishing the start of a month in other places, is not a new question. Rather, Shaykh Ṭūsī mentioned it in his book *al-Mabsūt* about one thousand years ago. Evidently, nobody raised this issue before him and even after he passed away, the matter remained generally neglected until the time of ‘Allāmah Ḥillī who discussed it in his works *al-Tadkirah* and *al-Muntahā*. After him, this matter has been discussed by all the scholars up to the present time.

In the present age, this matter has gotten greater attention and the reason for this is the ubiquity of means of communication and the almost instant spread of news and information from different places, whereas this was not the case in the past.

It should be noted that the common edict of the majority of Shi‘a scholars was that if the moon is sighted in a city, this does not establish the beginning of a new month in the cities that lie to its east. For example, Shaykh Ṭūsī says in his book *al-Mabsūt*:

When the moon is sighted in a city, the places outside that city – as we have stated – must follow the rules of the first of the lunar month, with the condition that the cities wherein the moon was

sighted are nearby such that if the sky were clear and in the absence of hindrances, the moon would be visible in these cities as well because the cities are near each other, like the cities of Baghdad, Wasit, Kufa, Tikrit and Musal. But if the cities are far away from each other like Baghdad and [the cities of] Khorasan or Baghdad and [the cities of] Egypt, then each place will have its own independent ruling and it is not necessary for the residents of one city to act on the ruling of another city where the moon has been sighted.<sup>1</sup>

From the quotation above, it is evident that he considers unity of horizon to be a condition for determination of moon sighting, and this is the most common opinion among the erstwhile and later scholars.

The most famous jurist, in the present age, who held that unity of horizon is not a requirement was the late Muhaqqiq al-Khū'ī (q). In his discussion on this issue, he says that a group of scholars hold the same opinion and he names them as follows:

The late 'Allāmah [al-Hillī], in his book *al-Tadhkirah*, has narrated this opinion from some Shi'a scholars and has himself explicitly accepted it in his book *al-Muntahā*. al-Shahīd al-Awwal, in his book *al-Durūs*, has said that it is possible that this view is correct. Muḥaddith [al-Fayd] al-

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<sup>1</sup> Shaykh Ṭūsī, *al-Mabsūt*, vol. 1, p. 268

Kāshānī in his book *al-Wāfi* and Ṣāḥib al-Ḥadā'iq<sup>2</sup> in *al-Ḥadā'iq* have both accepted this opinion whereas Ṣāḥib al-Jawāhir<sup>3</sup> in *al-Jawāhir* and the late [Ahmad ibn Muḥammad] al-Narāqī in *al-Mustanad* have expressed their inclination towards this opinion. Additionally, Abū Turāb Khwansārī in *Sharḥ Najāt al-‘Ibād* and the late [Sayyid Muhsin] al-Ḥakīm in *al-Mustamsak* have generally expressed their inclination towards this opinion.<sup>4</sup>

In order to examine his statement, after referring to the respective works we say:

The claim that ‘Allāmah [al-Ḥillī] attributed this opinion to some scholars is unsubstantiated. This is because we still do not know who the original statement belongs to, for if the person who said it was reliable, he would have clearly mentioned his name, and if there was no mistake in the attribution, it is evident that he was not very reliable to begin with.

The ‘Allāmah himself has not accepted this opinion in the book *al-Muntahā*. Rather, after strengthening this opinion in a long and drawn-out discussion, in the end he opts to

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<sup>2</sup> He is Yūsuf ibn Ahmād al-Bahrānī and the work being referred to here is *al-Ḥadā'iq al-Nādirah fī Aḥkām al-‘Itrah al-Tāhirah* (Tr.)

<sup>3</sup> He is Muḥammad Ḥasan al-Najafī, the author of *Jawāhir al-Kalām fī Sharḥ Sharā‘i al-Islām* (Tr.)

<sup>4</sup> Sayyid al-Khū’ī, *Mīnhāj al-Ṣāliḥīn*, *al-‘Ibādāt*, *Kitāb al-Ṣawm*

take a different position on the matter and gives the following edict (*fatwā*):

If it becomes known that in one part of the world the moon has risen and in another, distant part of the globe, it has not risen, the same ruling is not applied to both places. But in cases other than this the right course is to give a similar ruling [for both places].

The same opinion has been accepted by the late al-Ḥakīm and Ṣāḥīb al-Jawāhir.

It must be said that even though what the late ‘Allāmah has stated in these few lines is perfectly sound, it is apparent that in order to give the same ruling for two places, we must know the correlation between them as far as sighting the moon is concerned.

As for what al-Shahīd al-Awwāl has said in *al-Durūs*, it is completely unrelated to this matter. Instead, he has only mentioned the likelihood that: ‘if the crescent is sighted in the East, the beginning of the lunar month is established in the West.’ It is important to note that this theory is not the bone of contention. Rather, that which scholars disagree upon is the case where the moon is sighted in the West – does it suffice to declare the first of the month in the East or not? So the statements of al-Shahīd in *al-Durūs* are unrelated to the matter at hand and this error on the part of a personality such as Muhaqqiq al-Khū’ī is surprising.

As for what Ṣāḥīb al-Ḥadā'iq has said, it is based on the flat earth theory because he did not believe that the earth was spherical. Based on this premise, difference in horizon has no meaning. We know that the statement of Ṣāḥīb al-Ḥadā'iq is void by necessity and its acceptance in our present age is tantamount to denying the obvious.

Fayḍ Kāshānī's opinion in *al-Mafātīḥ*, even though he mentioned something [to this effect] in *al-Wāfi* which is a compendium of narrations, is contrary to this.<sup>5</sup> Unfortunately we do not have the book of the late Sayyid Abū Turāb Khwānsārī so as to verify what he has said on this matter. Therefore, it is only the late al-Narāqī, in his book *al-Mustanad*, who has propounded this view and after him the late al-Khū'ī defended this opinion and became its proponent.

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<sup>5</sup> *Mafātīḥ al-Sharāyi'*, p. 257

## Is Unity of Horizon a Condition?

After taking a general look at the historical background of this discussion, we need to present some postulates in order to clarify the matter:

- 1) We know that the light of the moon is not its own, rather it is the reflection of the sun's light. We also know that half of the moon always faces the sun and is illuminated as it reflects the light from the sun. However, this illumination cannot always be seen in the same way by people on earth. This means that during the first nights after conjunction with the sun, it looks like a crescent and later, its illumination gradually increases until on the fourteenth night, the entire face of the moon becomes visible for the people on earth. Then its illumination begins to wane gradually until on the last three nights of the month when its light can no longer be seen, and this state is termed the 'waning crescent' meaning the crescent slowly becomes invisible. Every 29 days, 12 hours and 44 minutes, the moon completes its natural revolution around the earth.

The reason for the moon's invisibility is that during this phase, the moon is aligned between the earth and the sun and the side of the moon which reflects the sun's light is facing away from the earth whereas the dark side is facing towards the earth. Once the moon moves out of this position to the extent of 18 degrees, it can once again be seen on earth as a thin crescent. As the gap between the moon and the sun increases,

the light of the moon increases until it becomes a full moon (on the 14<sup>th</sup> of the lunar month).

The moon becomes visible after it moves out of its 'new moon' phase such that the rays of the sun no longer prevent it from being visible and the moon's light is bright enough to be seen by the naked eye. This is because, if the light that is coming towards earth is very weak, the crescent will not be visible without an optical aid.

- 2) Based on the above, if the crescent is seen in an area or city, it would be possible to see it in cities that lie to the west of it, as long as there is no hindrance (like clouds, dust, smog etc.), and the first of the month is thus established in those cities. This is because the moon has moved far enough away from the sun so as to be visible and every time this distance increases, the moon gets further illuminated. But in the cities that lie to the east, if they are far off, it is unknown whether the moon would be visible there on the same night as it is possible that at sunset in these easterly cities the moon may not have come out of conjunction with the sun. To elaborate further we say:

If the moon is sighted in Tehran (for example), it would be visible in cities to the west like Zanjan and Tabriz, because the moon will have passed out of conjunction with the sun at sunset in those cities. However, in cities like Khorasan which lie to the east of Tehran, it may not be visible. In fact, in certain easterly cities it may be impossible to sight the moon because in those

areas the moon has not passed this phase [in those places].

Thus the question is: if the moon is sighted in the west, does this suffice to establish the beginning of the month in the east as well? Here we will first study the opinions of the great scholars and then give our own opinion, God-willing.

## The Evidence of Those Who Say Unity of Horizon is not a Condition

The late al-Khū'ī has given two types of evidence for his position: theoretical evidence and textual evidence.

### A critical examination of the theoretical evidence

In presenting the first proof, he says:

Lunar months are based on the movement of the moon and its specific position in relation to the sun. At a certain point, the month starts and when the moon completes a revolution and [re]enters into conjunction with the sun, it becomes invisible. In this state, termed 'new moon' or 'dark of the moon' (*muḥāq*), the moon is not visible in any part of the earth. When the moon comes out of this phase, it becomes visible and this marks the beginning of the next lunar month.

It is evident that the passing of the moon from this phase marks the beginning of the new month for all places on earth, despite the difference in their easterly and westerly positions. This holds true even if the moon cannot be sighted in some places because of external hindrances like the rays of the sun, the spherical nature of the earth, the distance from the place it was sighted and the like. This matter has no bearing on the fact that the moon has passed out of the 'dark' phase, because it is evident that the moon does not change its phase more than once. Rather, this is a natural phenomenon and plurality [of occurrence] in nature is not something feasible. This is different from

sunrise which varies from place to place, and each location has its own sunrise.

Our answer in brief:

It must be said that it is the sighting of the moon that is a condition for the beginning of a lunar month, not the celestial movement of the moon away from the sun. The evidence for this is that if the moon cannot be seen with the naked eye, but using a telescope one determines that it has passed out of the 'dark' phase, none of the scholars – not even those who do not believe in the conditionality of unity of horizon – have said that this is sufficient to establish the first of the month.

To elaborate further, essentially one of the important reasons for the creation of the moon is so that people may be able to know the date. This purpose cannot be fulfilled but through sighting [the moon] – not its physical transition from the 'dark' phase. In order to clarify this, I wish to draw your attention to some verses from the Qur'ān:

يَسْأَلُونَكَ عَنِ الْأَهْلَةِ قُلْ هِيَ مَوَاقِعُ النَّاسِ وَالْحَجَّ

*They question you concerning the crescents. Say, "They are timekeeping signs for the people and for the Hajj." (Q2:189)*

It is obvious that the question here is not about the state of the moon itself, for if that was the case the word 'crescent', in its singular form, would have been more appropriate. The plural form has been used to refer to the changing

phases that indicate completion of the preceding month and the start of the following one. Therefore this question is apparently about the change of the moon from crescent to full-moon and from phase to phase, and the answer given (i.e. that it is a means of establishing the time for people) will only be correct and useful when human beings are able to witness these changes; otherwise, the actual physical emergence of the moon [from conjunction] which is not perceptible to the people is not only useless for keeping time but would also lead to differences between them. It is not correct to say: “The phenomenal emergence of the moon from darkness is a means of timekeeping for people and for the Hajj.” Rather, it is the visible crescent that is useful for keeping time and knowing when the Hajj rites are to be performed. This is why the narrator asked the Imām (‘a) about ‘the crescents’ and in his reply, the Imām said:

هِيَ أَهِلَّةُ الشُّهُورِ فَإِذَا رَأَيْتَ الْهِلَالِ فَصُمْ وَ إِذَا رَأَيْتَهُ فَأَفْطِرْ

*These are the crescents of the [lunar] months – so when you see the crescent then start fasting and when you see it [again] then end your fasting.<sup>6</sup>*

We see that the Imām defines the criterion for starting and ending the fasting as sighting the crescent, not the emergence of the moon from the ‘new moon’ phase.

The second verse is:

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<sup>6</sup> Hurr al-‘Amilī, *Wasā'il al-Shī'a*, vol. 10, p. 252

هُوَ الَّذِي جَعَلَ الشَّمْسَ ضِيَاءً وَ الْقَمَرَ نُورًا وَ قَدْرَةً مَنَازِلَ لِتَعْلَمُوا عَدَدَ  
السَّنِينَ وَ الْحِسَابَ

*It is He who made the sun shine and the moon glow, and  
ordained its phases that you might know the number of years  
and the calculation (Q10:5)*

This verse clearly shows that the creation of the moon and its phases are for knowing the [time of] year and for calculation and computation. This goal is only attainable through sighting the crescent, not its emergence from the 'dark' phase that people are unable to perceive... This is also probably what can be understood from the verse:

وَالشَّمْسَ وَالْقَمَرَ حُسْبَانًا

*And the sun and moon for calculation... (Q6:96)*

Hence Shaykh Ṭūsī (q) has said: Allah, the Almighty, has alluded that the computation of the [revolutions of the] sun and moon is beneficial for the people in their works, histories and timekeeping for their [acts of] worship.

In short, Allah has created the moon and stars for calculation of time and computation, and this cannot be achieved except if perceived by the community at large. It is surprising that the late Sayyid al-Khū'ī (q) based his ruling upon the actual emergence of the moon from the new moon phase despite the fact that none of the verses or narrations have said this. What the verses and traditions state is that the criterion is the crescent and its sighting, and in this too, each place has its own specific ruling.

Therefore, if the crescent cannot be sighted in Khorasan, it means that at that moment the moon is still in conjunction [with the sun] and in the new moon phase – so the new lunar month has not commenced. If we imagine that half an hour after sunset at Khorasan it emerges from the new moon phase, at the exact moment when the sun sets in Tehran where it is possible to sight and is actually seen, what evidence is there that the ruling of sighting this crescent applies to cities where sunset took place before it did in Tehran, like the city of Khorasan, when we know that the moon could not have been sighted in those cities? Thus it is not correct to rule that by sighting the crescent in Tehran it is the first of the month in Khorasan as well.

If, hypothetically, we accept that the criterion is the actual emergence of the moon from conjunction, it still holds that if at sunset in Tehran the moon emerged from the new moon phase and was seen, because it had not emerged earlier when the sun was setting in Mashhad, it is evident that the moon could not be seen there and it is not possible to say that the new [lunar] month has started in Mashhad.

### A critical examination of the textual evidence

هِشَامُ بْنُ الْحَكَمِ عَنْ أَبِي عَبْدِ اللَّهِ عَنْ أَنَّهُ قَالَ: فِيمَنْ صَامَ تِسْعَةَ وَعِشْرِينَ قَالَ إِنْ كَانَتْ لَهُ بَيْنَهُ عَادِلَةٌ عَلَى أَهْلِ مِصْرٍ أَنَّهُمْ صَامُوا ثَلَاثَيْنَ عَلَى رُؤْيَاهُ قَضَى يَوْمًا.

Hishām ibn Ḥakam narrated that Abī ‘Abdillāh (al-Ṣādiq) (‘a) said about the one who fasted for twenty-nine days: “If he acquires just testimony that the people of a [certain] city fasted for thirty days based on sighting [of the moon], he will have to make up one day [of fasting].”<sup>7</sup>

The general purport of this tradition indicates that sighting the moon in one town is sufficient for other towns, even if the moon is not seen there – even if there is no hindrance like clouds or the like – and the Imām (‘a) did not stipulate that moon sighting is contingent upon unity of horizon, despite the fact that even in a small country like Iraq, horizons of cities are different...<sup>8</sup>

In response we say: the term ‘city’ in this tradition apparently means the city of the questioner, not a different city,<sup>9</sup> and if the tradition is general in this aspect, thereby including other cities, it still does not mean any near or distant city, for the Imām was not referring to this. Actually, it could be said that the Imām was only referring to a nearby eastern or western city.

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<sup>7</sup> Wasā'il al-Shī'a, vol. 10, p. 265

<sup>8</sup> Mustanad al-‘Urwah, vol. 2, p. 121

<sup>9</sup> That is, the apparent meaning of this tradition is that the person for whom the first of the month is a day of doubt (*yawm al-shak*) and he does not fast, if he sees the moon after twenty-nine days and doubts whether he has fasted for the entire month or not, with the possibility of his not having fasted on the first day... In response to this question, the Imām said: If people of the city have evidence (in the form of two just witnesses) that it was the first of the month and thus fasted for thirty days, he should make up for one missed fast.

عَنْ عَبْدِ الرَّحْمَنِ بْنِ أَبِي عَبْدِ اللَّهِ قَالَ: سَأَلْتُ أَبَا عَبْدِ اللَّهِ عَنْ هِلَالِ شَهْرِ رَمَضَانَ - يَعْمُ عَلَيْنَا فِي تِسْعَ وَعِشْرِينَ مِنْ شَعْبَانَ - فَقَالَ لَا تَصْمِ إِلَّا أَنْ تَرَاهُ فَإِنْ شَهِدَ أَهْلُ بَلْدِ آخَرَ فَاقْضِيهِ.

‘Abd al-Rahmān ibn Abī ‘Abdillāh said: I asked Abā ‘Abdillāh (al-Şādiq) (‘a) about the crescent of the month of Ramaḍān – [when] it becomes cloudy on the 29<sup>th</sup> of Sha‘bān. He said, “Do not fast until you see it; but if the people of another city sight it, then make up for it.”<sup>10</sup>

Sayyid al-Khū’ī says, “This narration shows that it is sufficient to sight the moon in another city, whether it shares the horizon with the questioner’s city or not, because the Imām’s words are general and not conditional.”<sup>11</sup>

In response we say: It is problematic to generalize this tradition given that the question mentioned the weather being ‘cloudy’. This condition is possibly contextual, limiting the ruling to two cities that are so close that if the weather had not been cloudy, it would have been possible to sight the moon [in the questioner’s city as well]. Additionally, it is also difficult to claim that this tradition has a general purport because the Imām was not explaining the ruling related to all cities, no matter how distant and different their horizons. Rather, what we are sure of is that

<sup>10</sup> Wasā'il al-Shī'a, vol. 10, p. 254

<sup>11</sup> Mustanad al-‘Urwah, vol. 2, p. 121

this applies to nearby cities that share the horizon of the questioner's city.

From this discussion we get a clear response to another narration that Sayyid al-Khū'ī (q) has used as proof for his position:

عَنْ إِسْحَاقَ بْنِ عَمَّارٍ قَالَ: سَأَلْتُ أَبَا عَبْدِ اللَّهِ عَنْ هِلَالِ رَمَضَانَ يُعْمَلُ عَلَيْنَا فِي تَسْعِ وَعِشْرِينَ مِنْ شَعْبَانَ فَقَالَ: لَا تَصْنُمْ إِلَّا أَنْ تَرَاهُ فَإِنْ شَهِدَ أَهْلُ بَلْدِ آخَرَ أَنَّهُمْ رَأَوْهُ فَأَقْضِهِ ...

Ishāq ibn 'Ammār said: I asked Abā 'Abdillāh (al-Şādiq) عليه السلام about the crescent of the month of Ramaḍān which becomes obscured for us by clouds on the 29<sup>th</sup> of Sha'bān. He said, "Do not fast until you see it (i.e. the moon), but if the people of another city bear witness that they saw it then make up for it..."<sup>12</sup>

One of the other narrations that Sayyid al-Khū'ī has referred to in support of his position, and one that he says is the clearest and most evident, is the sound narration of Abū Baśir from Imām al-Şādiq ('a) where he says:

أَنَّهُ سُئِلَ عَنِ الْيَوْمِ الَّذِي يُقْضَى مِنْ شَهْرِ رَمَضَانَ - فَقَالَ لَا تَقْضِيهِ إِلَّا أَنْ يُشَيَّتْ شَاهِدًا عَدْلًا مِنْ جَمِيعِ أَهْلِ الصَّلَاةِ مَتَى كَانَ رَأْسُ الشَّهْرِ وَقَالَ لَا تَصْنُمْ ذَلِكَ الْيَوْمَ الَّذِي يُقْضَى إِلَّا أَنْ يَقْضِيَ أَهْلُ الْأَمْصَارِ فَإِنْ فَعَلُوا فَصَنْمَةٌ.

<sup>12</sup> Wasā'il al-Shī'a, vol. 10, p. 279

He was asked about the day that needs to be made up (*qaḍā'*) from the month of Ramaḍān, so he said, “Do not fast the *qaḍā'* until two just witnesses from the people of prayer (*ahl al-ṣalāh*) give testimony about the beginning of the month.” And he said, “Do not fast the *qaḍā'* for that day unless the people of all the cities fast the *qaḍā'*; but if they do, then fast.”<sup>13</sup>

In presenting this narration as evidence, he states:

The important parts of this narration are the two phrases:

1. The Imām’s statement, “...two just witnesses from the people of prayer (*ahl al-ṣalāh*)...” This phrase indicates that the ruling is not restricted to any specific city. Rather, it is applicable to all Muslims living in different cities, regardless of whether they share the horizon or not. Therefore, whenever two just witnesses from any of the cities give testimony (*bayyinah*), it is enough for the people of this city and they should make up for the [missed] fast.
2. The second phrase is where the Imām ('a) says: “...unless the people of the cities fast the *qaḍā'*.”

Sayyid al-Khū'ī then concludes:

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<sup>13</sup> Ibid. p. 293

It is evident that there is no difference between the cities, and all cities come under the purview of this ruling.<sup>14</sup>

We respond by saying: Not only does this narration not support his conclusion, it gives an even better argument against his claim, because the first phrase: “two just witnesses from the people of prayer (*ahl al-ṣalāh*)” only indicates that justice (*‘adl*) is a condition for witnesses, and when this condition is met, the witnesses can be any members of society and it is not necessary that they belong to a specific group.

This is the same interpretation that has been proffered by the late Fayḍ Kāshānī (q) who said, “...meaning that he can be a follower of any sect (*madhhab*) of Islam.”<sup>15</sup> Therefore, in this narration the Imām did not want to say that it is sufficient for the witness to be from any city in any country.

As for the second phrase: “Do not fast... unless the people of all the cities fast the *qadā’*,” it is fair to say that the obligation (*wujūb*) of fasting the *qadā’* only comes about if the people of the cities fast the *qadā’* for that one day. Since the ruling is conditional upon the fasting of ‘people of all the cities’, not of one city, it is quite clear that if the first of the month is established in ‘all the cities’, it is established

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<sup>14</sup> *Minhāj al-ṣāliḥīn*, vol. 1, p. 281

<sup>15</sup> *al-Wāfi*, vol. 2, p. 23

in that one city as well and there is no reason to consider the unity of horizon in this case.

If we assume that, as he claims, the previous narrations are of general purport, still this narration evidently supports the idea of unity of horizon as we have explained. In this case, these two groups of narrations become contradictory – if we do not say that this narration is restrictive (*muqayyid*) of the previous narrations – and both of them are, due to the contradiction, nullified. In such a case, we must return to the apparent meaning of the narration:

صُمُّ لِلرُّؤْيَا وَ أَفْطِرْ لِلرُّؤْيَا

*Fast upon sighting [the moon] and stop fasting upon sighting [the moon].*

In conclusion, Sayyid al-Khū'i (q) buttresses his claim with two other points. First, the supplication recited on the day of 'Eid contains the phrase:

أَشَأْلُكَ فِي هَذَا الْيَوْمِ الَّذِي جَعَلْتَهُ لِلْمُسْلِمِينَ عِيدًا

*I ask you on this day that you have made an 'Eid for the  
Muslims...*

From this phrase we see that Allah has kept – despite all the differences in the horizon – one specific day which is referred to as 'this day' i.e. as the day of 'Eid; not that each land has its own 'Eid day which is different from other lands.

Second, the verses of the Qur'ān that speak about the Night of Qadr and the fact that it is better than a thousand months and is a night wherein “*every definitive matter is resolved.*” (Q44:4) From these verses, it is apparent that this night is, for all the people of the world, a single, specific night, not that each area and location has its own Night of Qadr which is different from place to place.

In response to him we say: Firstly, his statement does not apply to those cities in the opposite hemisphere which do not share any part of the night [with the current location]; because he himself explicitly stated: unity of horizon is not a condition for those places that share [part of] the night.

We ask him: How can it be appropriate for those areas that do not share part of a night to say on the next day: “...this day that You have made an ‘Eid for the Muslims” when it was ‘Eid on the previous day for other cities? And how do the residents of these places identify the Night of Qadr in their areas, while the hypothesis of Sayyid al-Khū'ī (q) is that the Night of Qadr is, in reality, a single night?

Secondly, we say that the statement: : “...this day that You have made an ‘Eid for the Muslims” refers to the first day of Shawwāl or the tenth of Dhīl-Hijja in every place, the same way that Thursday night or the nights of the month of Ramadān contain similar wordings while we know that

in some parts of the world night has not yet fallen; rather, whenever night falls, this statement becomes applicable.<sup>16</sup>

Thirdly, there is no evidence that the Night of Qadr is a single night for all the people of the world. It is possible that for those people in whose areas the moon is sighted the following day, the Night of Qadr is one day later and we have no evidence to the contrary.

After all this, we say: It is not appropriate for a *faqīh* to use such arguments in deducing his rulings or proving his position.

To this point we have seen that there is no incontrovertible evidence for the claim that unity of horizon is not a condition [for moon sighting] and the evidence presented by Sayyid al-Khū’ī is not sufficient.

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<sup>16</sup> In other words, it may be said that this event is relative and varies depending on the various locations. So this single concept has many outward manifestations.

## Evidence for the Conditionality of Unity of Horizon

There are two types of proof for the conditionality of unity of horizon: Qur'anic verses and narrations.

### Qur'ānic Verses:

The first type of evidence includes the two verses of the Qur'ān that we have already referred to in the previous section and will only briefly mention here before examining another verse:

#### 1. In the verse:

يَسْأَلُونَكَ عَنِ الْأَهْلَةِ قُلْ هُنَّ مُوَاقِتُ لِلنَّاسِ وَالْحَجَّ

*They question you concerning the crescents. Say, “They are timekeeping signs for the people and for the Hajj.” (Q2:189)*

...the Almighty answers those who asked about the changing phases of the moon. Thus the question is: why was the moon not created such that it remains full and bright at all times so that people may benefit from its light? In response, Allah says: These differing states of the moon are so that people may be able to keep time and know when to perform the rites of Hajj.

To elaborate further, the changing lunar phases enable people to easily establish the timings for their social contracts and ritual worship. For example, if the date for repayment of a loan is set to fifteenth of a particular month or the final date for paying rent is set to first of the month, the moon can be used to determine the exact date. In the same way, the exact

dates for the Hajj, the 'sacred months' and specific days like the day of 'Arafah and 'Eid can be known through the lunar crescent. This cannot be realized but by witnessing the moon - not by the mere emergence of the moon from its new moon phase in one city. This fact is quite evident for anyone who ponders over the abovementioned verse.

2. The same meaning can be found in another verse:

هُوَ الَّذِي جَعَلَ الشَّمْسَ ضِيَاءً وَ الْقَمَرَ نُورًا وَ قَدَرَهُ مَنَازِلَ لِتَعْلَمُوا  
عَدَدَ السَّنَينَ وَ الْحِسَابَ

*It is He who made the sun shine and the moon glow, and ordained its phases that you might know the number of years and the calculation (Q10:5)*

This verse clearly states that as people need to tell the time, Allah made the moon in such a way that through it, people would be able to know the year, month and time. Therefore, human beings must witness the moon and this witnessing is what enables them to distinguish the time, and the emergence [of the moon] from the new moon phase as sighted in one area is not sufficient for other places and cannot be the gauge for timekeeping.

In other verses also, this matter has been alluded to and we will suffice with only the following:

3. The verse:

فَمَنْ شَهَدَ مِنْكُمُ الشَّهْرَ فَلَيَصُمُّهُ

*So let those who witness the month fast therein (Q2:185)*

‘Allāmah Tabātabā’ī says in *Tafsīr al-Mīzān*:

The word *shahida* in this verse means presence and gaining information through presence.<sup>17</sup> Witnessing through presence is realized when the month of Ramadān enters and one has information about it.<sup>18</sup>

From this we learn that witnessing does not come about unless the moon is visible. Therefore, sighting the moon in a westerly city where, according to our hypothesis, the moon has just been born, does not establish the start of a new month in cities to the east. This is because in the easterly cities the moon has not yet been born and is thus not visible and cannot be witnessed. So if we take the word *shahida* in the verse to mean ‘sighting’, and it is quite possible that this is the correct meaning, it still shows that the moon needs to be visible in one’s location and thus, in either case, unity of horizon is a condition.

However, if we do take the second meaning i.e. ‘sighting’, it would mean that a person should sight the moon himself. Nevertheless, from other narrations we understand that the evidence presented by eyewitnesses is sufficient for establishing the start of a month. If it is said that the

<sup>17</sup> When one says I witnessed something, it means: I was present and as a result of my presence, I acquired information about what took place.

<sup>18</sup> *Tafsīr al-Mīzān*, vol. 2, p. 21

meaning of *shahida* in this verse is ‘present’ as opposed to ‘travelling’, as many exegetes have said, we would respond by saying: it is incorrect to interpret *shahida* as present in contrast to travelling because this interpretation has no basis and *shuhūd* has never been used in contrast to travelers.

Yes, this verse later explains the status of a traveler but this is an independent ruling it does not prove that *shahida* means ‘present’. The narration of ‘Ayyāshī where Imām al-Bāqir (‘a) said, “Whoever witnesses (*shahida*) Ramaḍān should fast therein and one who is travelling should not fast,”<sup>19</sup> is also in line with our understanding.

### Narrations:

The second evidence consists of numerous narrations from Imām al-Bāqir and Imām al-Şādiq (‘a) which all indicate that sighting the moon is necessary for establishing the start of a new month. In a number of traditions we find that Imām al-Şādiq (‘a) said:

إِذَا رَأَيْتُمُ الْهِلَالَ فَصُومُوا وَإِذَا رَأَيْتُمُوهُ فَافْتَرُوا

*When you see the crescent then begin fasting and when you see it [again] then end your fasting.*<sup>20</sup>

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<sup>19</sup> Tafsīr ‘Ayyāshī in his commentary of Q2:185

<sup>20</sup> Wasā'il al-Shī'a, vol. 10, p. 252

There are many similar narrations and we do not need to quote all of them.

As stated before, many traditions indicate that sighting the moon is necessary and it is axiomatic that sighting the moon in westerly locations does not automatically mean that the moon is also visible in easterly places. It may be impossible to sight the moon in the east because at sunset in those places, the moon has not yet emerged from the 'dark' phase such that it may be seen.

If it is said: This argument leads one to conclude that if a person does not see the moon himself, he does not have to begin fasting and this is something that nobody has suggested and nobody can say this because it is obvious that individual sighting is not necessary to establish the start of the new month.

In response we say: By dint of other narrations we learn that individual sighting is not a requirement for confirming the crescent and it is sufficient for others in the same location to see it.

عَنْ مَنْصُورِ بْنِ حَازِمٍ عَنْ أَبِي عَبْدِ اللَّهِ عَنْ أَنَّهَ قَالَ: صُمْ لِرُؤْيَاةِ الْهِلَالِ وَأَفْطِرْ لِرُؤْيَاةِ فَإِنْ شِهِدَ عِنْدَكَ شَاهِدًا مِنْ صَيَّانِ بَيْنَهُمَا رَأْيًا فَاقْضِيهِ.

Mansūr ibn Ḥāzim narrated that Abū ‘Abdillāh (al-Ṣādiq) ('a) said: "Fast when you see the crescent and stop fasting when you see it [again]; and if two acceptable witnesses

testify that they have seen it, then pass judgment accordingly.”<sup>21</sup>

We have many narrations that convey this meaning i.e. that the first of a lunar month may be established by [eyewitness] testimony, but this does not mean that it is a general ruling that applies to all cities regardless of the difference in horizon. Note that if we say that unity of horizon is not a condition and accept the proposition that if the moon is sighted in one place it is sufficient for all parts of the world, even those areas lying to the east, then because in most cases the moon is sighted in westerly lands before eastern cities, we must also accept that for a long period of time, in the past centuries, Muslims mostly fasted on the actual day of ‘Eid and celebrated ‘Eid on the following day. Even during the time of the Imāms (‘a), Muslims who lived in cities to the east of Ḥijāz, such as those in Iran, would, based on the rule: *fast upon sighting [the crescent] and end your fasting upon sighting [the crescent]*, fast on the day when Madīna was celebrating ‘Eid.

Therefore, it becomes clear that in the early period, including the time of the Imāms (‘a), people fulfilled their [religious] obligations and this needs to continue even now. In conclusion, we should mention that to prove this opinion, other evidence, aside from these two proofs, can also be presented and scholars have also put forward other evidence, only that the most important evidence consists of the two proofs we have mentioned.

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<sup>21</sup> Ibid. p. 254

## Conclusion

In conclusion, one issue remains that needs to be discussed and that is: the sufficiency of sighting the moon with an optical aid in order to establish the start of a new month. In our opinion, it is not sufficient to establish the start of a month by sighting the moon with an optical aid and if the crescent is spotted only with a telescope and is not seen in any other ways prescribed by the *shari‘a*, one cannot rule that the new month has begun.

Here, we briefly examine the evidence for this position:

Firstly, all the statements found in the traditions allude to sighting with the naked, unaided eye. This is the sighting that is possible for all people in all parts of the world – as we see in the narration of Muḥammad ibn Muslim from Imām al-Bāqir ('a) where he said:

إِذَا رَأَيْتُمُ الْهِلَالَ فَصُومُوا وَ إِذَا رَأَيْتُمُوهُ فَأَفْطِرُوا وَ لَيْسَ بِالرَّأْيِ وَ لَا  
بِالشَّكْنَى وَ لَكِنْ بِالرُّؤْيَةِ وَ الرُّؤْيَةُ لَيْسَ أَنْ يَقُومَ عَشَرَةُ فَيَقُولُوا وَاحِدٌ  
هُوَ ذَا هُوَ وَ يَنْتَظِرُ تِسْعَةً فَلَا يَرَوْنَهُ إِذَا رَأَاهُ وَاحِدٌ رَأَاهُ عَشَرَهُ آلَافَ.

“When you see the crescent then fast and when you see it [again] then stop your fasting. It (the crescent) is not [established] through conjecture or opinion but through sighting. And sighting does not mean ten people should search for the moon until one says: “there it is!” yet the other nine people do not see it. Rather, when one person

can see it, ten thousand other people should also be able to see it.”<sup>22</sup>

Additionally, in a sound narration from Yūnus ibn ‘Abd al-Rahmān, from Abī Ayyūb al-Khazzāz from Imām al-Ṣādiq (‘a), we read:

قُلْتُ لَهُ كَمْ يُجْزِي فِي رُؤْيَاةِ الْهِلَالِ فَقَالَ إِنَّ شَهْرَ رَمَضَانَ فَرِيقَةً مِنْ فَرِيقِ اللَّهِ فَلَا تُؤْدُوا بِالنَّظَلَى وَ لَيْسَ رُؤْيَاةُ الْهِلَالِ أَنْ يَقُولَ عِدَّةٌ فَيَقُولُ وَاحِدٌ قَدْ رَأَيْتُهُ وَ يَقُولُ الْآخَرُونَ لَمْ نَرَهُ إِذَا رَأَاهُ وَاحِدٌ رَأَاهُ مِائَةً وَ إِذَا رَأَاهُ مِائَةً رَأَاهُ أَلْفًا وَ لَا يُجْزِي فِي رُؤْيَاةِ الْهِلَالِ إِذَا لَمْ يَكُنْ فِي السَّمَاءِ عِلْمًا أَقْلُ مِنْ شَهَادَةِ خَمْسِينَ وَ إِذَا كَانَتْ فِي السَّمَاءِ عِلْمًا قِيلَتْ شَهَادَةُ رَجُلَيْنِ يَدْحُلَانِ وَ يَخْرُجَانِ مِنْ مِصْرِ.

I asked him, “How many [witnesses] are enough for declaring the sighting of the moon?” He (‘a) replied, “Indeed [fasting in] the month of Ramadān is one of the obligatory actions that have been prescribed by Allah, so it cannot be carried out by conjecture. And moon sighting is not for a group to set out in search of the moon until one of them says: “I have seen it” whereas the others say: “We did not see it.” If one person can see it, a hundred people can see it and if a hundred can see it then a thousand can see it; and it is not permissible in moon sighting, if there is no obstruction or hindrance in the sky, for less than fifty people to bear witness to having seen the moon. But in case of some hindrance [like thick clouds etc.] the testimony of

<sup>22</sup> Ibid. pp. 289-290

two [just] witnesses travelling to or from the city is enough.”<sup>23</sup>

There are more than a few other narrations that have sound chains and convey the same meaning as these two traditions. From these narrations we understand that the criterion is sighting the moon with the naked eye, for if we take the criterion to be sighting with optical aid, only a select few will be privy to the information about the commencement of a new month. However, the moon must be visible by everyone, not only a specific group of individuals.

Secondly, the movement of the moon and its changing phases on different nights allows its sighting to help in determining the dates and times which can be used for business contracts and other requirements. This is the reason for its creation, as the Glorious Qur’ān says:

يَسْأَلُونَكَ عَنِ الْأَهِلَّةِ قُلْ هِيَ مَوَاقِعُ اللِّنَّاسِ وَالْحَجَّ

*They question you concerning the crescents. Say, “They are timekeeping signs for the people and for the Hajj.”* (Q2:189)

This meaning is only realized through witnessing with the naked eye, which is possible for all human beings. If we say that the first of a lunar month is established by sighting with an optical aid, we will have to accept that for about 14 centuries the Muslims in most eras and lands neither marked the Night of Qadr, nor celebrated ‘Eid al-Fitr and

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<sup>23</sup> Ibid. p. 289

‘Eid al-Adhā, nor supplicated and performed the acts of worship that have been prescribed for specific nights and days on the correct days and nights, except in rare instances – because sighting the moon using optical aids could have been possible one day earlier.

Thirdly, if this was the case why did the Noble Prophet (ṣ) and the Pure Imāms (‘a) deem it sufficient to sight the moon with the naked eye? This, despite the fact that in most cases the moon is born one day earlier. It cannot be said that they did not know about this fact, so the only conclusion is that people are meant to sight the moon with the naked eye.

Fourthly, the time for performing pilgrimage - [going to] ‘Arafah and Mash‘ar, offering the sacrifice in Minā and stoning the Jamarāt – is dependent on the common sighting of the moon and all historical events have been recorded in accordance to the unaided sighting of the moon. This means that on the tenth of Dhil-Ḥijja when Prophet Ibrāhīm (‘a) wanted to sacrifice his son Ismā‘il, it was the tenth of the month according to unaided sighting. Put differently, one must ask: Did this historic event happen on the tenth day after the birth of the moon – which is only discernable using optical aids but cannot be seen with the naked eye – or was it the tenth day after the moon was sighted with the naked eye? The same goes for ‘Eid al-Fitr, the day of ‘Ashūrā, the 15<sup>th</sup> of Sha‘bān etc. It is undisputable that each of these historic events took place on the day that was calculated from moon sighting with the unaided eye.

Fifthly, if we wish to use extraordinary means to sight the new crescent, we should also do the same when purifying that which is unclean (*najis*), establishing the outlying peripheries of cities, determining sunrise and sunset etc. but in these matters the scholars do not approve of such means. For example, when cleaning the impurity of blood, all scholars say: when the blood is washed away, even if some of its color remains, it is considered pure. Yet if that area was observed under a microscope, blood molecules would still be visible. Similarly, if employing extraordinary means and using modern equipment could be made the criterion, the *hadd al-tarakhkuş* (the last point of a city's periphery from where the city wall can be seen and its call to prayer heard) would change as one could use a telescope or binoculars to see the city walls from a further distance and a hearing aid or any similar device to hear the prayer call...

The infallible Imāms ('a) have also hinted to this and we find them having forbidden the use of uncommon means in their traditions. For example, in many narrations we find that Imām al-Ṣādiq ('a) scolded a man who had climbed a mountain in order to find out whether the sun had set or not, and forbade him from doing so.<sup>24</sup>

Therefore, with due deference to the views of all the *mujtahids*, we opine that it is not sufficient to sight the moon using an optical aid to establish the first of a lunar month. Rather, the crescent must be seen with the naked

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<sup>24</sup> al-Tahdhīb, vol. 1, p. 145

eye, and in cases where other means are used, such as accepting the testimony of a number of people which leads to certitude or the testimony of two just witnesses etc., sighting is still the criterion of validity of the testimony.

*Peace be with you and with all the righteous servants of Allah.*

Shawwāl 1425 A.H.

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## رساله هلالیه

در شرط بودن اتحاد افق

برای ثبوت هلال ماه

آیه الله العظمی حاج میرزا ید الله دوزدوزانی